NOTES ON AUSTRALIAN RHOPALOCERA-LYC.ENID.E. PART II.

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This Part contains observations on the remainder of the new Lycaenidæ obtained by Mr. R. E. Turner during the present year in North Queensland. I propose in my next part to deal fully with each genus and draw up a comparison of the species placed in their respective genera.

Pseudonotis, Druce.

Ann. Mag. Nat. Hist. (6), xii., p. 252, 1894.

This genus is allied to *Thysonotis*, Hübn. (it has often been known as *Danis*, Fabr.). The insect hereunder described appears to belong to this genus; it is certainly unlike any other form found in Australia.

PSEUDONOTIS TURNERI, n.sp.

3. Upperside.—Forewing with costa nearly straight, apex acute, outer margin nearly straight, inner margin straight. Hindwing with costa arched, outer margin slightly concave in centre, anal angle greatly produced, inner margin nearly straight; two tails are present on the hindwing. Both wings white with broad black margins; base black; the broad black margin occupying almost the whole of the cell of the forewing and extending in an even band along the outer margins of both wings to the inner margin of the hindwing, widest near the anal angle. Between the submedian and first median, and first and second medians

the anal angle is marked with two very black conical spots which are bounded externally with white lines and internally with pale blue crescents. Along the outer margin are faint white lines, and above these are a few pale blue scales. The tails are nearly $\frac{1}{4}$ inch long, black tipped with white; and arise from the submedian nervure and first median nervule. The pale blue scales on the hindwing only appear so when viewed directly, but when the insect is held obliquely it will be seen that the blue scales are very extensive and are of a very brilliant electric blue colour. Cilia black.

Underside.—The scheme of colouration is as on upperside, but the white is replaced by cream. The marginal blue markings are more extensive and do not change colour when viewed in different directions. These pale blue scales are represented on the forewing by a submarginal narrow band, external to which is a pale line, and in the hindwing by arches between each of the nervules, the legs of these arches being continued down the nervules, while between the median nervules and submedian nervure are four blue lunules; the margin has a distinct white line running along it.

Q. Costa more arched; apex less acute; outer margin more convex than in the forewing of the male, and in the hindwing the anal angle is less produced and the tails are shorter. Otherwise as in the male.

In the available specimens the female is smaller than the male. Expanse, \eth 30-35 mm; Q 22-29 mm.

This species is probably the Australian form of P. danis, Feld.,* from which it differs in having much more white on the upperside. Felder's figure shows very little white on the upperside, while in the species described the white is of larger extent to the black. It also resembles P. milo, G. Smith & Kirby,† in general appearance, but that species is described and figured without, or at least with very short, tails (these may have been broken off), and the upperside is without the blue scales of the hindwing.

^{*} Reise Novara, Lep. ii., p. 240, n. 273, t. 30, figs. 12-13 (1865). + Rhop. Exot. Lycan. orient., xi., figs. 1 and 2, 1897.

It is also allied to Myrina derpiha, Hew.,* especially on the underside.

The larva is of a brilliant green, and was found by Mr. R. E. Turner feeding on a species of Orchid (Vanda section). The pupa is also brilliant green with no markings, but a depression behind the wings.

I am indebted to Mr. R. E. Turner for specimens of this insect from Kuranda near Cairns.

PHILIRIS, Röber.

Tijdschr. Ent. xxxiv., p. 317; Exot. Schmett. Theil ii., p. 273, 1892.

The type of this genus is *Thecla ilias*, Feld., and as both the following species are closely allied to that species, I have placed them in this genus, leaving aside the question for the present as to whether it should be sunk under *Candalides*, Hübn.,† the type of which is *C. xanthospilos*, Hübn.

PHILIRIS KAMERUNGÆ, sp.n.

3. Forewing with costa nearly straight, apex acute, outer margin straight, inner margin straight. Hindwing with outer margin entire.

Upperside.—Forewing with costal margin black, apex broadly black, outer margin black. The black margin is bounded by the subcostal nervure until the end of cell, then crosses the end of cell towards the outer margin and becomes less extensive to the angle. The rest of the wing purple, but viewed in some directions blue, except a small white patch in the centre of the wing external to the cell in the region of the median nervules. Hindwing with a narrow black outer margin, rest of wing purple except the apical angle, which is white above the subcostal nervure. Abdominal fold white. Cilia white.

^{*}Diurnal Lepid. Plate iii. b. (Supplt.), figs. 101, 102 (3), 1878. † Verzeichniss bekannt. Schmett. 20 (1816).

Underside pure silky white with very faint black terminations to the nervules on the outer margin. One small black spot midway near the inner margin of hindwing.

Q. Forewing with costa nearly straight, apex pointed, but outer margin convex. Outer margin of hindwing more rounded than in the male.

Upperside.—Forewing black and white, with a faint subbasal blue suffusion; the black costal border is wider than in the male and occupies all the cell, and extends somewhat along the inner margin (in one specimen it extends the whole length of the inner margin), thus leaving an almost circular central white spot. This central white spot, which is wholly below the cell, when viewed directly, is white, with the basal portion slightly blue, but when viewed obliquely has a beautiful pale silvery-blue sheen. Hindwing brown with apical angle white, the white apical patch in some specimens extending downwards through the cell to the median nervule and not having the blue sheen as in the forewing. Cilia white. Abdominal fold white.

Underside as in the male, but the terminations of the nervules are more marked.

Expanse, 3 23 mm.; Q 24-26 mm.

This insect is allied to *P. ilias*, Felder, but the white patches in both sexes are a ready means of identifying it.

Loc. - Cairns District.

PHILIRIS KURANDÆ, n.sp.

3. Forewing with costa very straight, apex very acute, outer margin straight. Hindwing with anal angle slightly produced.

Upperside.—Forewing dark purple with black costal border, apex broadly black and inner margin less broadly black. Hindwing with costal border broadly black, outer margin narrowly black, the rest of wing bright blue. Abdominal fold grey. Cilia white.

Underside silky white, terminations of veins black, but no black spot near inner margin of the hindwing as in P. Kamerungæ and P. ilias.

Q. Forewing with costa straight, apex not nearly so acute as in the male; outer margin convex. Hindwing with outer margin much more rounded than in the male.

Upperside.—Forewing with a very even black border extending along costa, apex and outer margin, where it is broadest, the rest of wing dull blue. Hindwing as in forewing, with the borders of about the same size. Cilia white, the nervules of the hindwing marked with black.

Underside as in the male.

Expanse, & 26-30 mm.; Q 29-31 mm.

It is noticeable that in the male of this species the forewing is purple and the hindwing blue, while in *P. ilias* both wings are purple; also it is a larger insect than *P. ilias*.

Loc.—Cairns District.

PHILIRIS ILIAS, Felder.

Thecla ilias, Felder, Sitzb. Akad. Wiss. Wien, Math. Nat. Cl. xl. p. 454, n. 22 (1860). Pseudodipsus ilias, Miskin, Syn. Cat. Rhop. Aust. p. 67 (1890); P. innotatus, Misk., Ent. Mo. Mag. 1874, p. 165.

3. Forewing with costa nearly straight, apex acute, outer margin straight, inner margin straight. Hindwing with outer margin entire.

Upperside.—Forewing with costal margin black, apex broadly black and outer margin black, the rest of wing purple. Hindwing with outer margin black, the rest of wing purple. Cilia white.

Underside pure silky white, with a fine black edge more noticeable at the terminations of the nervules. A small black spot near the middle of inner margin of hindwing.

Q. Forewing with costa nearly straight; apex pointed, outer margin very convex, outer margin of hindwing more rounded than in the male.

Upperside.—Forewing brown with a pale blue area situated between the median and submedian nervures and extending from

base to a little beyond the middle. *Hindwing* brown, with white cilia.

Underside as in the male. Expanse, \$\frac{25}{25}\$ mm.; \$\qquad 25-30\$ mm. Felder's type was from Amboina. I have not been able to see a specimen from that locality, but Miskin himself considered his species synonymic with Felder's, so I allow Felder's name to stand. It may be that our insect is not identical with the Amboina species, as I find Mr. Grose Smith has described a species, Holochila nitens,* from N. Queensland. If this is the case, P. innotatus has certain priority, and P. nitens must sink if it is, as I think, the same insect as the one under consideration. My specimens from Cape York agree very well with the figure of the male of P. nitens, and they are not markedly different from Cairns or Brisbane specimens.

Loc.—Richmond River, N.S.W. (G.A.W.) to Cape York, Q.

^{*} G. Smith, Nov. Zool. v. p. 107 (1898). G. Smith & Kirby, Rhop. Exot. Lyc. orient., 1899, pl. xx.